

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

ACH Food Companies, Inc.
Attn: Charles E. Rice, Sr.
1201 East Morton Road
Jacksonville, Illinois 62650-2999

Application No.: 96030167 I.D. No.: 137807AAA
Applicant's Designation: SHRTNING/CKINGOILS Date Received: DATE
Operation of: Edible Oil Manufacturing Process
Date Issued: November 20, 2002 Expiration Date²: November 20, 2007
Source Location: 1201 East Morton Road, Jacksonville, Morgan County
Responsible Official: Charles E. Rice, Sr.

This permit is hereby granted to the above-designated Permittee to operate edible oil manufacturing plant, bleaching clay feeders, and fuel combustion units, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Sunil Suthar at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SIS:psj

cc: Illinois EPA, FOS, Region 2

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 ACH Food Companies, Inc.

ACH Food Companies, Inc.
1201 East Morton Road
Jacksonville, Illinois 62650-2999
217/245-4131

I.D. No.: 137807AAA
Standard Industrial Classification: 2079, Shortening and Cooking
Oils

1.2 Owner/Parent Company

ACH Food Companies, Inc.
7171 Goodlett Farms Pkwy.
Cordova, Tennessee 38018-4907

1.3 Operator

ACH Food Companies, Inc.
1201 East Morton Road
Jacksonville, Illinois 62650-2999

Charles E. Rice, Sr.
217/245-4131

1.4 General Source Description

ACH Food Companies, Inc. Jacksonville Plant is located at 1201 East Morton Road in Jacksonville, Illinois. The facility manufactures edible oils and shortening and margarine products.

Incoming crude oil to the plant (i.e. soybean oil, cottonseed oil, peanut oil, palm oil, corn oil, lard, and tallow) is received via railcars or tank trucks. The crude oils contain residual hexane in varying concentrations as received from the supplier. The crude oil is distributed to and stored in bulk storage tanks. Emissions from product receiving, storage, and unloading are considered negligible.

Hydrogenated and bleached oil may be further processed by fractionation, a process by which fats are selectively crystallized and filtered from hydrogenated oils making specialized fat products. The soft fraction, which is more unsaturated than the specialized fats, is used in soft oil blends. VOM emissions from this process are considered negligible.

The bleaching process involves the addition of bleaching clay to the refined oil product to remove residual soapstock by-product and to reduce the chlorophyll and color. Emissions of particulate matter (PM) result from the addition of the bleaching

clay to the earth feeders (CF1-CF4) used in the pre-bleaching process. Emissions of PM from the feeders are captured by an aspirator hood and are controlled by a dust collector (DC1). Emissions of Hexane are also released from this process. Emissions of PM from the post-bleaching operation are considered negligible.

The bleached oil product can be hydrogenated by the addition of hydrogen in the presence of a nickel catalyst. The hydrogenation process is used to control the degree of unsaturation in the oil and to increase product stability. Emissions of PM resulting from the addition of filter aid to the catalyst mix tank are considered negligible.

As an alternative to hydrogenation, the bleached oil may undergo witerization to produce salad oil products. The process involves the crystallization of the hard fraction of the oil which is separated for the soft fraction. The soft fraction, which contains more unsaturation than the hard fraction, is used to produce salad oils. No emissions occur from this process.

The products of the hydrogenation and fractionation processes are deodorized. Deodorization is accomplished by steam striping the remaining fatty acids from the oil products in a deodorizer vessel. Heat supplied to the deodorizers is generated by three Dowtherm vaporizers (DV1, DV2, DV4), which fire natural gas, # 6 fuel oil or recovery fat to heat Dowtherm heating medium, one Multitherm heater (DV3), which fires natural gas, # 6 fuel oil or recovery fat to heat Multitherm heating medium, and two Steam Generation Systems (SGS1 and SGS2) which fire only natural gas to heat the distilled water contained within the system. The combustion of natural gas or fuel oil results in emissions of criteria pollutants. In addition, this process also generates emissions of Hexane.

The deodorized products are then shipped in tank cars or tank trucks for distribution, or are further processed to produce shortening, margarine, and salad oil products. These products are produced by the process of votation. Votation is crystallization process that utilizes a scrape surface heat exchanger. No emissions are generated during this process.

Hexane contained in the incoming crude oil is released into the atmosphere at several points within the manufacturing process. The quantification of emissions of hexane from these various emission points is difficult due to the number of different oils processed and their varying hexane concentrations. Therefore, emissions of hexane have been treated on a plantwide basis (i.e., the plant itself has been treated as a single point source of hexane emissions). Residual hexane is typically present in highest concentrations in cured soybean oil. To calculate potential emission so of hexane form the plant, the highest concentration of hexane was used, and it was assumed that only soybean oil was processed during the year.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CPM	Condensable Particulate Matter
CPM-IOR	Inorganic Condensable Particulate Matter
CPM-ORG	Organic Condensable Particulate Matter
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
m ²	Square meter
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
T	tons
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit

USEPA	United States Environmental Protection Agency
VMT	Vehicle miles traveled
VOM	Volatile Organic Material

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Tanks K-28 through K-39
Tank K-46 through K-48
Tanks K-99
Tank K-51 through K-53
Tank K-52
Tank K-55 through K-60
Tank K-66 through K-69
Tanks YK-76 through YK-102
Tanks K-150 through K-160
Tanks K-192 through K-200
Tank TD-701
Tank TD-706
Tanks K-712 through K-717
Tank TE-501
Tanks TE-502
Propane Storage Tanks
Tanks K-250 through K-260
Tanks K-263, 265, 267, 268
Tanks K-S1, K-S2
Tanks K-275 through K-279
Tanks K-221 through K-226
Tanks K-290 through K-292
Tanks TK-4 and TK 5
Tanks TK-6 and TK-7
Tank TK-15
Tanks VK-19 through VK-27
Tanks K-216 through K-219
Tanks K-801 through K-810
Tanks K-233 through K-235
Post Bleaching Process
Catalyst mix Tank

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Printing operations with aggregate organic solvent usage that never exceeds 750 gallons per year from all printing lines at the source, including organic solvent from inks, dilutents, fountain solutions, and cleaning materials [35 IAC 201.210(a)(14)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn

syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 01	Bleaching Clay Feeders CF1 - CF4, (4 total)	12/69	Dust Collector (DC-1)
Unit 02	Jacksonville Plant: Crude Oil Receiving, Storage and Unloading, Refining, Bleaching, and Deodorizing	1952	None
Unit 03	Natural Gas Fired Boilers 1, 2 and 3 with Fuel Oil #6 Back-up	Boilers 1 and 2: 2/51 Boiler 3: 1979	None
Unit 04	Dowtherm Vaporizers 1, 2, 3, and 4 with Fuel Oil #6 Back-up	Vaporizers 1 and 2: 5/52 Vaporizer 3: 5/93 Vaporizer 4: 5/86	None
Unit 05	Reformer Furnace with Propane Backup	9/1980	None
Unit 06	Fugitive Emissions from Paved Roads	----	----

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of HAP, VOM, PM, and NO_x emissions.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

- a. This stationary source, as defined in 40 CFR Section 68.3, is subject to 40 CFR Part 68, the Accidental Release Prevention regulations [40 CFR 68.215(a)(1)].
- b. The owner or operator of a stationary source shall revise and update the RMP submitted, as specified in 40 CFR 68.190.

5.2.5 a.

- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change,

change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and
 - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
 - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.9 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations.

The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	98.9
Sulfur Dioxide (SO ₂)	18.4
Particulate Matter (PM)	122.2
Nitrogen Oxides (NO _x)	507.1
HAP, not included in VOM or PM	---
Total	746.6

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for HAP Emissions

- a. Total annual emissions of each individual HAP and of total HAPs on a calendar year basis for the applicable emission units covered by Section 7 (Unit Specific Conditions) of this permit.

- b. Total monthly and running 12 month total HAP emissions for the whole source based on the applicable emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.3 Records for Operating Scenarios

N/A

5.6.4 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Bleaching Clay Feeders
Control: Dust Collector (DC - 1)

7.1.1 Description

Removal of residual soapstock by-product and reduction of chlorophyll and color.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 01	Bleaching Clay Feeders CF1 - CF4, (4 total)	12/69	Dust Collector (DC-1)

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected bleaching clay feeders" for the purpose of these unit-specific conditions, are the units described in 7.1.1 and 7.1.2.
- b. The affected bleaching clay feeders are subject to the emission limits identified in Condition 5.2.2.
- c. The affected bleaching clay feeders are subject to 35 IAC Part 212, Subpart L, Visible and Particulate Matter Emissions from Process Emission Unit. This regulation is attached hereto and incorporated herein by reference (see attachment 1).

7.1.4 Non-Applicability of Regulations of Concern

N/A

7.1.5 Operational and Production Limits and Work Practices

The Permittee shall install, operate, maintain, and replace the dust collector in a manner that assures compliance with the conditions of this section.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected bleaching clay feeders are subject to the following:

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.1.7 Operating Requirements

None

7.1.8 Inspection Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected bleaching clay feeders to demonstrate compliance with conditions 5.5.1 and 7.1.3(c), pursuant to Section 39.5(7)(b) of the Act:

Quantity of bleaching clay used in pounds

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected bleaching clay feeders with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Pursuant to 35 IAC 218.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.1.3(c) within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

Compliance with the Particulate limits of this section are assumed to be achieved by the work practices of condition 7.1.5 and those inherent in operation of the affected bleaching clay feeders, thus no compliance procedures are set in this permit addressing this regulation.

7.2 Unit 02: Jacksonville Plant
Control: None

7.2.1 Description

Hexane contained in the incoming crude oil is released into the atmosphere at several points within the manufacturing process. The quantification of emissions of hexane from these various emission points is difficult due to the number of different oils processed and their varying hexane concentrations. Therefore, emissions of hexane have been treated on a plantwide basis (i.e., the plant itself has been treated as a single point source of hexane emissions). Residual hexane is typically present in highest concentrations in cured soybean oil. To calculate potential emission so of hexane form the plant, the highest concentration of hexane was used, and it was assumed that only soybean oil was processed during the year.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 02	Jacksonville Plant: Crude Oil Receiving, Storage and Unloading, Refining, Bleaching and Deodorizing	1952	None

7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected Jacksonville Plant" for the purpose of these unit-specific conditions, is the unit described in 7.2.1 and 7.2.2.
- b. The affected Jacksonville Plant is subject to the emission limits identified in Condition 5.2.2.
- c. The affected mixer is subject to 35 IAC Part 215, Subpart K: Use of Organic Material. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

7.2.4 Non-Applicability of Regulations of Concern

N/A

7.2.5 Operational and Production Limits and Work Practices

None

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected Jacksonville Plant is subject to the following:

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.2.7 Operating Requirements

None

7.2.8 Inspection Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Jacksonville Plant to demonstrate compliance with conditions 5.5.1 and 7.2.3(c) pursuant to Section 39.5(7)(b) of the Act:

- a. Processing Rate of Incoming Crude Oil, million lb/yr;
- b. Concentration of Hexane in Incoming Crude Oil, ppm;
and
- c. Operating hours per year.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected Jacksonville Plant with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

Compliance of the affected Jacksonville Plant with Conditions 5.5.1, and 7.2.3(c) shall be based on the recordkeeping requirements of 7.2.9 and the following formula as provided in the Title V Permit application:

Hourly emissions of Hexane, lb/hr = Processing Rate of Incoming Crude Oil, million lb/yr x Concentration of Hexane in Incoming Crude Oil, lb/l x 10⁶ lb x 1 yr/Operating Hours Per Year

Hexane Emissions, T/yr = (Hourly emissions of Hexane, lb/hr) x (Operating Hours Per Year) x (1 ton/2000 pounds)

7.3 Unit 03: Boilers - Three natural gas-fired boilers, each with a maximum design heat input capacity of 100 mmBtu/hr or less, but greater than or equal to 10 mmBtu/hr and constructed, modified or reconstructed before June 9, 1989 with Fuel Oil # 6 Backup capabilities.

Control: None

7.3.1 Description

Production of steam/heat in natural gas fired boilers with backup residual oil firing capabilities.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 03	Natural Gas Fired Boilers 1,2 and 3 with Fuel Oil #6 Back-up	Boilers 1 and 2: 2/51 Boiler 3: 1979	None

7.3.3 Applicability Provisions and Applicable Regulations

- a. The "affected Boilers" for the purpose of these unit-specific conditions, are the units described in conditions 7.3.1 and 7.3.2.
- b. The affected Boilers are subject to the emission limits identified in Condition 5.2.2.
- c. The affected Boilers are subject to 35 IAC Part 212, Subpart E: Visible and Particulate Emissions from Fuel Combustion Units. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).
- d. The affected Boilers are subject to 35 IAC Part 214, Subpart D: Sulfur Limitations for Existing Liquid or Mixed Fuel Combustion Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).
- e. The emissions of carbon monoxide (CO) into the atmosphere from any fuel combustion unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]
- f. Startup Provisions

The Permittee is authorized to operate an affected boilers in violation of the applicable limit of

Conditions 5.2.2(b) (i.e., 35 IAC 212.123 during startup pursuant to 35 IAC 201.262, respectively, as the Permittee has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual starts, and frequency of startups. This authorization is subject to the following:

- i. This authorization only extends for a period of up to three-hours following initial firing of fuel during each startup event.
- ii. The Permittee shall minimize startup emissions, the duration of startups and minimize the frequency of startups, by implementing any established startup procedures, which may include insuring a proper air-fuel ratio during startup and proper maintenance of each affected boiler.

7.3.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units constructed, reconstructed, or modified after June 9, 1989, with firing rates of 100 mmBtu/hr or less, but greater than 10 But/hr. All three of the affected boilers were constructed prior to June 9, 1989 and therefore, are not subject to this regulation.
- b. The affected boilers are not subject to 35 IAC 217.141, because the actual heat input of the affected boiler is less than 73.2 MB (250 mmBtu/hr).

7.3.5 Operational and Production Limits and Work Practices

- a. Each affected boiler shall only be operated with natural gas or residual fuel oil as the fuels.
- b. The Permittee shall not use residual fuel oil in the affected boilers with a sulfur content greater than the larger of the following two values:
 - i. 0.28 weight percent, or
 - ii. The Wt percent given by the formula:
$$\text{Maximum Wt percent sulfur} = (0.00005) \times (\text{Gross heating value of oil, Btu/lb}).$$

- c. Organic liquid by-products or waste materials shall not be used in these fuel combustion emission sources without written approval from this Agency.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected boilers are subject to the following:

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.3.7 Operating Requirements

None

7.3.8 Inspection Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with conditions 5.5.1, and 7.3.3(d) pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage for the affected boilers (ft³/yr);
- b. Total amount of recovery fat usage for the affected boilers (gal/yr);
- c. Total residual fuel oil usage for the affected boilers (gal/yr);
- d. The maximum sulfur content (in Wt.%) for each shipment of residual fuel oil used in the affected boilers; and
- e. Annual aggregate NO_x, PM, SO₂, and VOM emissions from the affected boilers, based on fuel consumption and the applicable emission factors, with supporting calculations.
- f. Records for Startup

The Permittee shall maintain the following records, pursuant to Section 39.5(7)(b) of the Act, for each affected boiler subject to Condition 7.3.5(d), which at a minimum shall include:

- i. The following information for each startup of each affected boiler:
 - A. Date and duration of the startup, i.e., start time and time normal operation achieved, i.e., stable operation at load;
 - B. If normal operation was not achieved within 18 hours, an explanation why startup could not be achieved in 18 hours;
 - C. A detailed description of the startup;
 - D. The nature of opacity, i.e., severity and duration, during the startup and the nature of opacity at the conclusion of startup, if above normal; and
 - E. Whether exceedance of Condition 5.2.2(b) may have occurred during startup, with explanation and estimated duration (minutes).

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected boilers with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Notification within 60 days of operation of an affected boiler that may not have been compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident.
- b. If there is an exceedance of sulfur content of residual fuel oil in excess of the limit specified in Condition 7.3.5, the Permittee shall submit a report within 30 days after receipt of a noncompliant shipment of distillate fuel oil.
- c. Emissions of NO_x, PM, SO₂, or VOM from the affected boilers in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

a. Compliance with the emission limits in Conditions 5.5.1 and 7.3.6 shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

i. Emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/Mft³)</u>
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Boiler Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

ii. Emissions from the affected boilers burning residual fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Fuel Oil #6 Emission Factor (lb/10³ gal)</u>
SO ₂	157(S)
PM	10
CMP-TOT	1.5
CMP-IOR	85%(1.5)
CMP-ORG	15%(1.5)
NO _x	55
VOM	1.28

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1 and 1.3-3, AP-42, Volume I, Fifth Edition, September 1998. "%S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Boiler Emissions (ton) = distillate fuel oil
consumed (gallons) multiplied by the
appropriate emission factor/2000.

- b. Compliance of the affected boilers with Conditions 7.3.3(c) and (e) is demonstrated under inherent operating conditions of the affected boilers so that no compliance procedures are set in this project addressing these regulations.
- c. Compliance of the affected boilers with Condition 7.3.3(d) is demonstrated under inherent operating conditions of the affected boilers fired by residual fuel oil with a sulfur content meeting the specifications of Condition 7.3.5(b), so that no compliance procedures are set in this permit addressing this regulation.

7.3 Unit 04: Dowtherm Vaporizers
Control: None

7.4.1 Description

Production of heat in natural gas fired heaters, with residual oil firing capabilities:

Two Units of 4.6 mmBtu design heat input capacity.

One unit of 6 mmBtu design heat input capacity

One of 8.57 mmBtu design heat input capacity.

Production of heat/steam in natural gas fired units:

Two steam generators (SG1 and SG2); combined firing rate shall not exceed 4.3 mmBtu/hr

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 04	Dowtherm Vaporizers 1, 2, 3, and 4 with Fuel Oil #6 Back-up & Recovery Fat Back-up	Vaporizers 1 and 2: 5/52 Vaporizer 3: 5/93 Vaporizer 4: 5/86	None
	Steam Generation Systems 1 & 2 (SGS-1 and SGS-2) natural gas only	8/2002	

7.4.3 Applicability Provisions and Applicable Regulations

- a. The "affected vaporizers" for the purpose of these unit-specific conditions, are the units described in conditions 7.4.1 and 7.4.2.
- b. The affected vaporizers are subject to the emission limits identified in Condition 5.2.2.
- c. The affected vaporizers are subject to 35 IAC Part 212, Subpart E: Visible and Particulate Emissions from Fuel Combustion Units. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).
- d. The affected vaporizers are subject to 35 IAC Part 214, Subpart D: Sulfur Limitations for Existing

Liquid or Mixed Fuel Combustion Emission Sources.
This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

7.4.4 Non-Applicability of Regulations of Concern

- a. The affected vaporizers are not subject to 35 IAC 216.121, since the affected vaporizers are less than the required 29 MW (10 mmBtu/hr) design heat input capacity required for applicability.
- b. The affected vaporizers are not subject to 35 IAC 217.141, since the actual heat input capacity of the vaporizers are less than 73.2 MW (25 mmBtu/hr).

7.4.5 Operational and Production Limits and Work Practices

- a. Each affected vaporizers shall only be operated with natural gas, residual fuel oil and recovery fat as the fuels.
- b. The Permittee shall not use residual fuel oil in the affected vaporizers with a sulfur content greater than the larger of the following two values:
 - i. 0.28 weight percent, or
 - ii. The Wt percent given by the formula:
$$\text{Maximum Wt percent sulfur} = (0.00005) \times (\text{Gross heating value of oil, Btu/lb}).$$
- c. Organic liquid by-products or waste materials shall not be used in these fuel combustion emission sources without written approval from this Agency.

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected vaporizers are subject to the following:

- a. The affected vaporizers with heat input capacities of 4.6 and 6 mmBtu/hr are subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated by reference (see Attachment 2).
- b. The above limitations were established in Permit 77050078 and 86050007, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major

modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. [T1]

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

7.4.7 Operating Requirements

None

7.4.8 Inspection Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected vaporizers to demonstrate compliance with conditions 5.5.1, 7.4.3(d), and 7.4.6 pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage for the affected vaporizers (ft³/yr);
- b. Total residual fuel oil usage for the affected vaporizers (gal/yr);
- c. The maximum sulfur content (in Wt.%) for each shipment of residual fuel oil used in the affected vaporizers; and
- d. Annual aggregate NO_x, PM, SO₂, and VOM emissions from the affected vaporizers, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected vaporizers with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Notification within 60 days of operation of an affected boiler that may not have been compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident.

- b. If there is an exceedance of sulfur content of residual fuel oil in excess of the limit specified in Condition 7.4.5, the Permittee shall submit a report within 30 days after receipt of a noncompliant shipment of distillate fuel oil.
- c. Emissions of NO_x, PM, SO₂, or VOM from the affected vaporizers in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

- a. Compliance with the emission limits in Conditions 5.5.1 and 7.4.6 shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

- i. Emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/Mft³)</u>
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Boiler Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

- ii. Emissions from the affected vaporizers burning residual fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Fuel Oil #6 Emission Factor</u> <u>(lb/10³ gal)</u>
SO ₂	157(S)
PM	10
NO _x	55
VOM	1.28

These are the emission factors for uncontrolled residual fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1 and 1.3-3, AP-42, Volume I, Fifth Edition, September 1998. "%S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Boiler Emissions (ton) = residual fuel oil consumed (gallons) multiplied by the appropriate emission factor/2000.

- b. Compliance with Condition 7.4.3(c) is demonstrated under inherent operating conditions of the affected vaporizers so that no compliance procedures are set in this permit addressing these regulations.

- c. Compliance of the affected vaporizers with Condition 7.4.3(d) is demonstrated under inherent operating conditions of the affected vaporizers fired by residual oil with a sulfur content meeting the specifications of Condition 7.4.5(b), so that no compliance procedures are set in this permit addressing this regulation.

7.5 Unit 05: Reformer Furnace with Propane Backup Capability
Control: None

7.5.1 Description

Production of heat in a natural gas fired heater of 7.00 mmBtu/hr maximum firing rate, with propane firing capabilities.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 05	Reformer Furnace Maximum Firing Rate: 7.00 mmBtu/Hr	9/1980	None

7.5.3 Applicability Provisions and Applicable Regulations

- a. The "affected furnace" for the purpose of these unit-specific conditions, is the unit described in Conditions 7.5.1 and 7.5.2.
- b. The affected furnace is subject to the emission limits identified in Condition 5.2.2.

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected furnace is not subject to 35 IAC 217.141, since the actual heat input capacity of the furnace is less than 73.2 MW (250 mmBtu/hr).
- b. The affected furnace is not subject to 35 IAC 216.121 since the actual heat input is less than 2.9 MW (10 mmBtu/hr) required for applicability of this rule.

7.5.5 Operational and Production Limits and Work Practices

None

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected furnace is subject to the following:

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.5.7 Operating Requirements

None

7.5.8 Inspection Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected furnace to demonstrate compliance with condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. Total propane usage for the furnace burner (gallons/year);
- b. Annual aggregate NO_x, PM, and VOM emissions from the affected furnace, based on fuel consumption and the applicable emission factors, with supporting calculations;
- c. Total natural gas usage for the furnace burner (ft³/yr);

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected furnace with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Emissions of CO from an affected boiler in excess of the limits specified in Condition 7.5.3(b) within 30 days of such an occurrence.
- b. Emissions of NO_x, PM, or VOM from the affected furnace in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

- a. Compliance provisions addressing Condition 7.5.3 (b) is not set by this permit as compliance is assumed to be achieved by proper operating conditions of the affected boiler.

- b. Emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/Mft³)</u>
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Boiler Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

- c. Compliance with the emission limits in condition 5.5 shall be based on the recordkeeping requirements in Condition 7.5.9 and the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Emission Pounds/1,000 Gallons</u>
PM	0.6
NO _x	19
CO	3.2
VOM	0.2

These are emission factors determined for the affected furnace using standard AP-42 emission factors Table 1.5-1, Volume I, Fifth Edition, October 1996.

Furnace emissions (lb) = (Propane consumed, gallons) x (The appropriate emission factor in lb/1000 gallons)

7.6 Unit 06: Fugitive Emissions

7.6.1 Description

Moving vehicles create particulate matter (road dust) emissions on paved roadways.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Control
Unit 06	Fugitive Emissions from Paved Roads	---	---

7.6.3 Applicability Provisions and Applicable Regulations

Refer to the source-wide conditions in Section 5 which address opacity requirements.

7.6.4 Non-Applicability of Regulations of Concern

N/A

7.6.5 Control Requirements

None

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, Unit 6 is subject to the following:

None

7.6.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act and 35 IAC 212.107, for both fugitive and non-fugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This test method shall be used to determine compliance with 35 IAC 212.123 [35 IAC 212.107].
- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, except that for roadways and parking areas the number of readings

required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged. This test method shall be used to determine compliance with 35 IAC 212.301 [35 IAC 212.109].

7.6.8 Inspection Requirements

N/A

7.6.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items to demonstrate compliance with Conditions 5.5.1 and this section pursuant to Section 39.5(7)(b) of the Act:

For Paved Roads:

- a. E = Particulate emission factor (lb/VMT)
- b. k = Particle size multiplier (dimensionless)
- c. sL = Silt loading (grams/m²)
- d. W = Mean vehicle weight (tons)

Records for fugitive road dust shall be calculated on an annual basis, except this calculation shall be updated if substantial changes to the roads occur, i.e. additional roads added.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the permit requirements pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

Compliance with the emission limits of section 5 shall be based on the recordkeeping and reporting requirements in

this section and the emission factors and methods listed below:

Emissions from paved roads shall be calculated based on the following emission factors and formulas from Section 13.2.1 AP-42, Volume I, January, 1995:

$$E = k [sL/2]^{0.65} [W/3]^{1.5}$$

Conversion factors used: 2000 lb/ton

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after **October 7, 2002** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this

permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

The following permits and attachments contain applicable requirements to this source and are an integral part of this permit. The permit conditions contained in these attachments should be thoroughly reviewed and complied with, including all emission limitations, monitoring, record keeping and reporting. Any requirements these permits and attachments that conflict with those requirements found in Sections 3 through 9 are superseded by those found in Sections 3 through 9.

- 10.1 Attachment 1 - Applicable Regulations from 35 Illinois Administrative Code, Subtitle B: Air Pollution, Chapter I: Pollution Control

PART 212: VISIBLE AND PARTICULATE MATTER EMISSIONS

SUBPART L: PARTICULATE MATTER EMISSIONS FROM PROCESS EMISSION SOURCES

Section 212.321 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

- a. Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A (P)^B$$

Where:

P = Process weight rate; and
E = Allowable emission rate; and,

1. Up to process weight rates of 408 MG/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

2. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

c. Limits for Process Emission Units For Which Construction of Modification Commenced On or After April 14,1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

Where:

P = Process weight rate in metric or T/hr, and
 E = Allowable emission rate in kg/hr or lbs/hr.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 2996)

Section 212.322 Process Emission Units For Which Construction or Modification Commenced Prior to April 14,1972.

- a. Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14,1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A (P)^B$$

Where:

P = Process weight rate; and,
 E = Allowable emission rate; and,

1. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

2. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

- c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

	Metric	English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87

P	Metric	English	E
	E	P	
Mg/hr	kg/hr	T/hr	lbs/hr
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.323 Stock Piles

Sections 212.321 and 212.322 of this Subpart shall not apply to emission units, such as stock piles of particulate matter, to which, because of the disperse nature of such emission units, such rules cannot reasonably be applied.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

PART 214:SULFUR LIMITATIONS

SUBPART D: EXISTING LIQUID OR MIXED FUEL COMBUSTION EMISSION SOURCES

Section 214.161 Liquid Fuel Burned Exclusively

No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion emission source, burning liquid fuel exclusively:

- a) To exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (1.0 lbs/mmBtu);
- b) To exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).

Section 214.162 Combination of Fuels

- a) No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any fuel combustion emission source burning simultaneously any combination of solid, liquid and gaseous fuels to exceed the allowable emission rate determined by the following equation:

$$E = AX + BY + CZ$$

- b) Symbols in the equation mean the following:

E = allowable sulfur dioxide emission rate;

A = solid fuel sulfur dioxide emission standard which is applicable;

B = distillate oil sulfur dioxide emission standard determined from the table in subsection (d);

C = residual fuel oil sulfur dioxide emission standard which is applicable;

- c) X = actual heat input from solid fuel;

Y = actual heat input from distillate fuel oil;

Z = actual heat input from residual fuel oil;

- d) That portion of the actual heat input that is derived:

- 1) From the burning of gaseous fuels produced by the gasification of solid fuels shall be included in X;
- 2) From the burning of gaseous fuels produced by the gasification of distillate fuel oil shall be included in Y;
- 3) From the burning of gaseous fuels produced by the gasification of residual fuel oil shall be included in Z;
- 4) From the burning of gaseous fuels produced by the

- gasification of any other liquid fuel shall be included in Z; and,
- e) From the burning of by-product gases such as those produced from a blast furnace or a catalyst regeneration unit in a petroleum refinery shall be included in Z.
- f) Metric or English units may be used in the equation of subsection (a) as follows:

Parameter	Metric	English
E	kg/hr	lbs/hr
A, C	kg/MW-hr	lbs/mmBtu
B	0.46 kg/MW-hr	0.3 lbs/mmBtu
X, Y, Z	MW	hr/hr

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

PART 215:ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS

SUBPART K: USE OF ORGANIC MATERIAL

Section 215.301 Use of Organic Material

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in Sections 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.302 Alternative Standard

Emissions of organic material in excess of those permitted by Section 215.301 are allowable if such emissions are controlled by one of the following methods:

- a. Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water; or,
- b. A vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere; or,
- c. Any other air pollution control equipment approved by the Agency capable of reducing by 85 percent or more the

uncontrolled organic material that would be otherwise emitted to the atmosphere.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.303 Fuel Combustion Emission Sources

The provisions of Sections 215.301 and 215.302 shall not apply to fuel combustion emission sources.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.304 Operations with Compliance Program

The provisions of Section 215.301 and 215.302 shall not apply to any owner, operator, user or manufacturer of paint, varnish, lacquer, coatings or printing ink whose compliance program and project completion schedule, as required by 35 Ill. Adm. Code 201, provides for the reduction of organic material used in such process to 20 percent or less of total volume by May 30, 1975.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.305 Viscose Exemption (Repealed)

(Source: Repealed at 9 Ill. Reg. 13960, effective August 28, 1985)

Section 212.206 Emission Units Using Liquid Fuel Exclusively

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/hr).

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

10.2 Attachment 2 - State Construction and Operating Permits

The following permits and attachments contain applicable requirements to this source and are an integral part of this permit. The permit conditions contained in these attachments should be thoroughly reviewed and complied with, including all emission limitations, monitoring, record keeping and reporting. Any requirements these permits and attachments that conflict with those requirements found in Sections 3 through 9 are superseded by those found in Sections 3 through 9.

217/782-2113

OPERATING PERMIT

PERMITTEE

Kraft Food Ingredients Corp.
 Attn: E.W. Wright
 1201 East Morton Road
 Jacksonville, Illinois 62650-2999

Application No.: 77050078 I.D. No.: 137807AAA
Applicant's Designation: DOW 1-3 Date Received: June 19, 1992
Subject: Dowtherm Vaporizers #1, 2, & 3
Date Issued: July 8, 1992 Expiration Date: June 4, 1997
Location: 1201 East Morton Road, Jacksonville

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of two 4.6 mmBtu/Hr Dowtherm Vaporizers #1 & 2 and one 6 mmBtu/Hr Dowtherm Vaporizer #3 as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Nitrogen Oxide</u>		<u>Carbon Monoxide</u>		<u>PM₁₀</u>	
	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>
Dowtherm Vaporizer #3	2.2	9.61	0.2	0.87	0.28	1.20

These limits are based on standard emission factors, alternate firing of No. 6 fuel oil, maximum firing rate (6 mmBtu/Hr), and maximum hours of operation, as indicated in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. Emissions of Sulfur Dioxide and Particulate Matter shall not exceed (6 Lb/Hr)(26.21 T/Yr) and (0.6 Lb/Hr)(2.62 T/Yr). These limits are based on allowable emission rates pursuant to Rule 214.122(B)(1) and Rule 212.206, alternate firing of No. 6 fuel oil, maximum firing rate

(6 mmBtu/Hr), and maximum hours of operation, as indicated in the permit application.

3. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Nitrogen Oxide</u>		<u>Carbon Monoxide</u>	
	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>
Dowtherm Vaporizer #3	0.6	2.6	0.12	0.52

These limits are based on standard emission factors, primary firing of natural gas, annual consumption (52,000,000 scf/yr), and maximum hours of operation, as indicated in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

4. At the above location, the Permittee shall not keep, store, or utilize a residual fuel oil (Grades No. 4, 5 and 6) with a sulfur content greater than that given by the formula:

$$\text{Maximum wt. percent sulfur} = (0.00004) \times (\text{Gross heating value of the oil in BTU/lb}).$$

5. Organic liquid by-products or waste materials shall not be used in these fuel combustion emission sources without written approval from this Agency.
6. The Agency shall be allowed to sample all fuels stored at the above location.

It should be noted that this permit has been revised to include operation of the equipment described in construction permit 92060060. It should also be noted that this permit has been revised to include the replacement of Dowtherm Vaporizer #3 with a new 6 mmBtu/Hr Dowtherm Vaporizer #3.

If you have any questions on this, please call Bill Marr at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:WDM:jmm/sp/280N/47-48

cc: Region 2

10.3 Attachment 3 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.
2. Minor Permit Modification
 - Do not violate any applicable requirement;
 - Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information			
1. Source name:			
2. Source street address:			
3. City:		4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No			
6. Township name:	7. County:	8. I.D. number:	

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents

24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30.	I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature: BY: _____ <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%; text-align: center;"> _____ <small>AUTHORIZED SIGNATURE</small> </div> <div style="width: 45%; text-align: center;"> _____ <small>TITLE OF SIGNATORY</small> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%; text-align: center;"> _____ <small>TYPED OR PRINTED NAME OF SIGNATORY</small> </div> <div style="width: 45%; text-align: center;"> _____ / _____ / _____ <small>DATE</small> </div> </div>

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.6 Attachment 6 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT,

as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control

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Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

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